

STATEMENT OF THE SUBSTANCE OF INTERVIEW

The following recordation of the substance of the interview is believed to be complete and proper, in accordance with MPEP 713.04. It is requested that the Examiner notify the undersigned if she believes this Statement contains any inaccuracies or if the Examiner believes the Statement is otherwise not complete and proper.

Telephone interview participants: (1) Examiner Katherine A. Bareford; and (2) Applicant's attorney, Adonis A. Neblett. No exhibit or demonstration was shown during the interview - the interview was telephonic. Claims 39 and 44 and the claims depending therefrom amongst others were generally discussed during the interview. U.S. Patent Nos. 5,707,326 (Mishima) and 4,957,058 (Boguslavsky) as well as WO 99/61674 ('674) were discussed during the interview.

The telephonic interview was conducted on February 21, 2007. In the interview, Applicant's representative and the Examiner discussed the rejections in the outstanding Office Action based upon Mishima and Boguslavsky and further in combination with other cited references. The Examiner acknowledged that neither Mishima or Boguslavsky, alone or in combination, taught or disclosed the stopping and restarting or the varying of target motion at preprogrammed points and/or the plasma spraying step continuing during preprogrammed stopping and restarting or varying of target motion. While it was acknowledged that amendment to the claims clarifying that the stopping and restarting and the varying of target motion occurred at preprogrammed points and that the plasma spraying step continued during the stopping and restarting of target motion or the varying of target motion at preprogrammed points may overcome rejections based whole or in part upon Mishima and Boguslavsky, no agreement was reached regarding specific claim language.

Whether a similar clarifying amendment would overcome the rejections based upon ‘674 was raised by Applicant’s representative. The Examiner indicated that she would have to consider this in the context of Applicant’s response; and no agreement was reached regarding whether such amendment would overcome the rejections based upon ‘674.

No other pertinent matters were discussed during the interview.

REMARKS

Applicant has carefully reviewed the Office Action mailed December 6, 2006. By this Amendment, claims 39, 44, 53 and 54 are amended and claim 39, 41-51, 53 and 54 are pending in this application. Applicant has amended the claims solely to advance prosecution of the instant application and to obtain allowance the earliest possible date. Accordingly, no admission may be inferred from the amendments of claims herein. Applicant expressly reserves the right to pursue the originally filed claims in the future.

Applicant submits that no new subject matter has been introduced into the claims by the present amendment and that the claim limitations introduced by amendment are supported by the specification, claims and drawings.

The pending claims all stand rejected under 35 U.S.C. 103(a) based upon Mishima combined with either Boguslavsky or ‘674 or based upon one or the other combination of these references further in view of additional cited references. Applicant submits that the additional cited references were not cited by the Examiner to cure nor do they serve to cure the deficiencies of the combination of Mishima with either Boguslavsky or ‘674; and therefore, Applicant focuses the below remarks on the deficiencies of each of these combinations of references.

With respect to the rejections based upon the combination of Mishima and Boguslavsky, the Examiner stated, “Mishima teaches all the features of the claims except the spraying method using a target assembly and the moving system with starting and stopping as claimed.” Relying upon the teachings of Boguslavsky, the Examiner stated, “It is indicated that the motion of the target can be started and stopped at varying, unexpected points during the coating process. Column 5, lines 25-35.”

Applicant submits that Boguslavsky does not teach stopping and restarting of target motion at preprogrammed points while the plasma spraying continues as is recited in amended independent claims 39 and 53. In fact, Boguslavsky teaches that plasma spraying onto the workpiece or target is disrupted or terminated during the unexpected stops. Boguslavsky expressly states that during the unexpected stops the spray gun 17 is “inclined to non-working position in which the ingredients of the coating fail to fall onto workpiece 9” and that movement of both the spray gun 17 and workpiece 9 terminates preventing application of the coating to the surface of workpiece 9. See column 5, lines 28-40.

Consequently, Boguslavsky does not cure the deficiencies of Mishima acknowledged by the Examiner’s statements. Further, Boguslavsky does not teach or suggest stopping and restarting of target motion at preprogrammed points as claimed.

In light of the clarifying amendments to claims 39 and 53 and the above noted deficiencies of Mishima in combination with Boguslavsky, Applicant respectfully submits that the rejections based thereon have been overcome.

With respect to the rejections based upon the combination of Mishima and ‘674, the Examiner stated, “Mishima teaches all the features of the claims except the spraying method using a target assembly and the moving system with varying of the rate of the target motion during spraying as claimed.” With respect to ‘674, the Examiner stated, “. . . ‘674 provided a system that monitors substrate temperature and controls various process features such as deposition rate based on the monitored substrate temperature, and the control of deposition rate

would include control of rotation speed of the target during spraying. This provides the suggestion that variation in temperature is expected to occur and varying the rotational rate of the target in response to these temperature variations is a known and desirable method for keeping the substrate temperature in the desired range.”

Applicant submits that ‘674 does not teach varying the rate of target motion at preprogrammed points while the plasma spraying continues as is recited in amended independent claims 44 and 54. As noted by the Examiner’s statements, ‘674 is concerned with regulating the temperature of the solidified coating 40 on the surface of the substrate. The focus of ‘674 on temperature regulation is further emphasized by disclosure relating to intense cooling of the substrate with, for example, a cryogenic cooler. In ‘674, the lone reference to rotational speed that Applicant can identify is at page 12, lines 26-28. While this disclosure indicates that the listed parameters may be controlled to achieve the temperature specified, it does not teach or suggest that the parameter of rotational motion (or any other motion) is varied at preprogrammed points as recited in amended claims 44 and 54.

Consequently, ‘674 does not cure the deficiencies of Mishima acknowledged by the Examiner’s statements. Further, ‘674 does not teach or suggest varying of target motion at preprogrammed points as claimed.

In light of the clarifying amendments to claims 44 and 54 and the above noted deficiencies of Mishima in combination with ‘674, Applicant respectfully submits that the rejections based thereon have been overcome.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested. No new claims have been introduced with this Amendment; and Applicant believes that no additional fee is due as a result of this amendment. However, the Commissioner is hereby authorized to charge any additional filing fees required to Deposit Account No. 061910.

If the Examiner believes that an Examiner's amendment would put this application in condition for allowance or would like to discuss this submission for any reason, Applicant would welcome the Examiner's input and respectfully requests a telephonic interview. The Examiner may contact the undersigned at (612) 492-7049 to schedule such an interview if necessary.

Respectfully submitted,

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